



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax (804) 698-4500 TDD (804) 698-4021

[www.deq.virginia.gov](http://www.deq.virginia.gov)

L. Preston Bryant, Jr.  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4000  
1-800-592-5482

## AD HOC ADVISORY COMMITTEE MEETING SUMMARY

### *Aquaculture Enhancement Areas*

*April 24, 2008*

### Welcome and Introductions

#### Advisory Committee Members Present:

**Agriculture/Farming:** Butch Nottingham, Jane Corson-Lassiter

**Aquaculture Industry:** Andy Drewer, Mike Peirson, Pete Terry, John West

**Development/Real Estate:** Ralph Dodd, Ace Seybolt

**Environmental:** Chris Moore (Chesapeake Bay Foundation), John Chubb (Citizens for a Better Eastern Shore), Steve Parker (Nature Conservancy)

**General Interests:** Rusty Gowen

**Localities and Towns:** Terry Long, Elaine Meil, Robert Ritter

**Academic:** Marcia Berman, Mark Luckenbach

#### Staff Present to Assist TAC:

**VA Department of Environmental Quality (DEQ):** Ellen Gilinsky, Alan Pollock, Jim

McConathy, Elleanore Daub, Laura McKay, Vijay Satyal

**VA Department of Health (VDH):** Keith Skiles (Shellfish Sanitation); Don Alexander (On-Site Sewer and Water)

**VA Department of Conservation and Recreation (DCR):** Arthur Kirby

**VA Marine Resources Commission:** Jim Wesson

**Welcome, Updates, Summary of Last Meeting:** The meeting summary was reviewed and no changes were suggested.

**Shellfish buffer zones; public hearing (9 VAC 25-260-270).** Alan Pollock provided further clarification of the existing section of the water quality standards regulation and how this rulemaking is expected to enhance those existing protections (public hearings and permit decisions). We are not planning on revising the existing section (9 VAC 25-260-270) which currently reads as follows:

#### **9 VAC 25-260-270. Shellfish buffer zones; public hearing.**

*Before acting on any proposal for a project that, while not contravening established numeric criteria for shellfish waters, would result in condemnation by the State Health Department of shellfish beds, the board shall convene a public hearing to determine the socio-economic effect of the proposal. Such proposals include discharge of treated waste or proposals to otherwise alter the biological, chemical or physical properties of state waters. If the Marine Resources Commission or the Virginia Institute of Marine Science certify that the project would have no effect on the shellfish use now and in the foreseeable future, the board may dispense with such hearing.*

*When the board finds that the proposed project will result in shellfish bed condemnation and if the condemnation will violate the general standard, it shall disapprove the proposal.*

Key points are that shellfish water include all waters along the Eastern Shore, the DSS has a process to decide upon condemnations (flow chart provided) and that the decision to dispense with holding a public hearing rests upon the statement that the proposal (e.g. a discharge permit application) has no effect on shellfish use now AND in the foreseeable future. This means that the board looks for certification from VMRC that an immediate and continuing detrimental effect on shellfish propagation, growth or harvesting (commercial or recreational) is or is not occurring. If it is occurring, the board must hold the public hearing.

The State Water Control Board uses all the information gathered (included any received at the public hearing) to make a decision about the violation of the General Standard. The potential violation of the General Standard, along with the DSS condemnation decision affects their decision on whether to issue the discharge permit.

The existing regulatory process described above protects shellfish waters in several ways:

- 1) Provides the Board with means to secure information about the effect on shellfish resources of a proposed discharge; and,
- 2) Requires disapproval of the proposal if it would lead to a shellfish bed condemnation that will violate the general standard. Generally speaking, the proposal will likely be disapproved if it has an effect on shellfish use now and in the foreseeable future.

Objective of this rulemaking: provide additional protection for high-quality waters suitable for aquaculture as follows:

- 1) Proposed dischargers into Aquaculture Enhancement Areas would be required to conduct an analysis of alternatives to a discharge to these waters; currently such an analysis is only encouraged. New permit guidance will be needed.
- 2) In cases where a proposed discharge is to waters where there is no effect on shellfish now and in the foreseeable future, section 270 does not apply. This rulemaking could establish the authority for the Board to disapprove a proposal if there is an alternative to a discharge that produces less environmental impact.

It was suggested that cost impacts to protect the resources could far outweigh the economic benefit realized. Much discussion ensued on how the existing regulatory approach compares to the proposal for Aquaculture Enhancement Zones.

**Designation of Aquaculture Enhancement Areas:** DEQ staff described existing definitions of shellfish in various laws of the Commonwealth and asked the group to discuss the forms of aquaculture that should be the focus of this rulemaking (clams, oysters, other). Various issues were discussed including whether protection should extend beyond the human health / fecal coliform / condemnation / approach and consider the affect of other ‘substances’ (like freshwater or nutrient input) and how it affects the marine ecosystem. The group discussed the feasibility of including crab shedding operations under the protective cover of this rulemaking. It is a top industry but is not tied to condemnations and can be operated far from water. Some preferred a simplified approach at first (bivalves) and see how that goes.

It was clarified that poultry houses are not point sources and are considered 'no discharge' facilities and are permitted under a program called Virginia Pollutant Abatement (VPA). Also that if the discharge alternative chosen requires another permit or approval from a different authority (like an on-site septic system), those approval requirements would still apply and that authority (e.g. the Health Department) would still administer those requirements. Also that the choice of which alternative is best will consider feasibility and economics as well as environmental impacts.

It was suggested that any public hearing notices for permit actions go out to the affected shellfish lease holders.

It was suggested the DEQ be very clear about what needs to be done and simplify the requirements as much as possible.

DEQ staff suggested the focus of the rule be on clams and oysters and that was generally accepted.

Staff demonstrated existing mapping capabilities on Coastal GEMS and the clam and oyster suitability and vulnerability models to help the group identify bivalve aquaculture areas. Some members thought all the eastern shore waters were potential aquaculture enhancement zones and other members thought this was too broad and such a broad designation would hurt other designated uses (recreation). The waters are for everyone, not just aquaculture.

It was clarified that aquaculture and submerged aquatic vegetation cannot co-exist and both are important uses to preserve and both require good water quality. If SAV is restored perhaps the bay scallop can return (another important resource to the ecology and economy). VMRC will not issue a lease or permit to an area containing SAV.

The VIMS suitability and vulnerability models were presented. The basic suitability model shows where aquaculture could take place and considered presence of SAV, bathymetry, salinity and water quality to determine optimal, suitable and unsuitable areas. Most areas were suitable. Then they worked to be more discriminating and focused on the impact of land uses to clams and oysters in the vulnerability model and established risk levels based on all the variables. It was pointed out that zoning may not reflect actual land uses.

The group was asked to consider the options of designating all waters, optimal to suitable waters (or least vulnerable) or waters at risk (most vulnerable). The discussion went back to opposing sides of a broad designation vs. a minimal designated area. Those opposed thought that a broad designation would not allow other uses (the water is for everybody not just for the clam industry). Also, a TAC would not be needed to identify waters if the requirements were to apply everywhere. A development should not be expected to do this if aquaculture was not occurring near the development. These new rules would put an impact on developers and agriculture industries to protect the aquaculture industry, which is unfair. A discharge of highly treated freshwater effluent is insignificant to the water body and has much less input than a rainfall event. These are not old systems or raw sewage and the impacts are not as they were years ago. One suggestion was to identify a percentage of waters for aquaculture rather than specific areas and the aquaculture business can demonstrate where those waters are.

Those in favor of a broad designation thought that it is more difficult to fix water quality problems in the future that might be allowed to occur in non-designated areas. They also didn't see a use

conflict but that the rulemaking will generally protect water quality for all uses. The rule will not tell people what to do with their land, just what we need to do to protect the public water resources. A sewage discharge, no matter how clean, will result in a condemnation and a potential removal of a shellfish use. It was also mentioned that it would be unfair to have certain restrictions in some areas and not in another and consistency was another argument for a broad designation. It was pointed out that we lack the ability to tell how far an impact really goes. A line or area demarcation does not tell the permit writer what the true impact will be to a resource outside of that area. Hydrodynamic models are needed for each water body on the Eastern Shore to understand the impacts and that is not available. Clam aquaculture has a lot of room to grow and oyster aquaculture has a wider range of salinity tolerance so this supports the need to include potential uses and designate a broader area.

This is an old piece of regulation written in terms of an old resource from the last century and it's time to consider the current shellfish uses (for cultivation now or potential) and how likely it could improve.

It is anticipated that many (if not all) waters under the existing regulation would be considered by VMRC as having a shellfish use and a hearing would be held and likely that a discharge permit would ultimately be denied. An alternatives analysis would have to be done if the project is to be built. It was pointed out that alternative analyses are usually conducted anyway when a project is considered. Shellfish resources should be defined (current, past, how many?). Maryland has a good definition of shellfish resources. DEQ staff was not sure that was appropriate for a DEQ regulation rather than a VMRC regulation. Any waters that do not have a resource (per VMRC), under the current regulations, might still be allowed. Under these new requirements, an alternative analysis would have to be conducted first.

There are many requirements on other industries that are continually adding up. It will be difficult to provide equity to the different industries or to pick areas to protect and it is difficult to predict consequences down the road. Perhaps provide an option for an area to 'opt out' of the requirements.

Staff agreed it is unfair to expect agreement today given that we don't fully understand the affect of the designation. Staff will have something more definitive for the group to comment on at the next meeting (e.g. what the alternatives analysis will require).

Staff will send the committee a link to the rulemaking web page.

**Economic Impact Studies** (this agenda item was not discussed)

### **Public Comment**

Wanda Thornton – This regulation could have a much broader impact and affect other projects such as CAFOS and TMDLs. Noted the TMDL in Occohannock Creek as an example. With Accomack being 90% agriculture this rule could have a wider impact. The focus of this action is not narrow and it could expand and affect other land uses.

**Future Meetings:** American Legion Hall, Cheriton, May 22, 2008. 10:30 a.m.

**Handouts distributed at the April meeting:**

## Agenda

March Meeting Summary

Paper entitled *How Will This Process Enhance Existing Protection of Aquaculture Waters?*

Copies of Aquaculture Definitions Slides

Industrial Activities Covered by DEQ storm water permit (SIC Codes)